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**DRAFT MEETING MINUTES  
WATER POLLUTION CONTROL ADVISORY COUNCIL  
Friday, February 27, 2015  
10:00 AM – 12:20 PM  
Metcalf Building  
1520 E. Sixth Ave, Helena, MT 59620**

**PRESENT**

*Council Members Present:*

*Barbara Chillcott  
Mitchell Leu  
Stevie Neuman  
Earl Salley  
Karen Bucklin Sanchez (by phone)  
Trevor Selch  
Keith Smith  
Michael Wendland  
Kathleen Williams (by phone)*

*Council Members Absent:*

*Mack Cole  
Dude Tyler*

*Montana Department of Environmental Quality Staff Members Present:*

*Kirsten Bowers  
Rainie DeVaney  
Carrie Greeley  
Erik Makus  
George Mathieus  
Adam McMahon  
Michael Pipp  
Amy Steinmetz  
Eric Urban*

*Guests:*

*Stephen Begley  
Mark Fix  
Art Hayes  
Anne Hedges  
Derf Johnson  
Tina Laidlaw  
Colin Lauderdale  
Brenda Lindlief Hall  
Vicki Marquis  
Svein Newman*

**CALL TO ORDER**

Chairperson Trevor Selch called the meeting to order at 10:03 a.m.

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### **APPROVAL OF AGENDA**

Mr. Earl Salley moved to approve the agenda as written and Mr. Keith Smith seconded the motion. There was no opposition; the motion carried.

### **APPROVAL OF MINUTES**

Mr. Salley moved to approve the January 9, 2015, meeting minutes as written and Ms. Stevie Neuman seconded the motion. There was no opposition; the motion carried.

### **BRIEFING ITEMS**

#### **Legislative Update –**

Mr. George Mathieus, division administrator for Planning, Prevention and Assistance, gave a brief description of the water legislation with which the Department of Environmental Quality (DEQ) has been involved. Senate Bill 28, which is an agency bill, deals with DEQ's State Revolving Fund Program. Mr. Mathieus said that this is a fairly simple bill that has already passed. It extended the financing cap for the loans from 20 to 30 years.

Another agency bill, Senate Bill 97, expands DEQ's abilities in classifying state waters. Existing broad classifications sometimes create situations where permit limits must be used to protect these classifications even though the use may never have, or will, exist in the waterbody. This bill gives DEQ the ability to expand upon Clean Water Act (CWA) tools, allowing for more appropriate classifications and permit limits that reflect the reality of the waters. This bill was voted for 48 to 1.

Senate Bill 112 gives DEQ a timeframe for which to complete a TMDL in conjunction with the timing of the permit application. The bill, which has changed significantly, provides provisions to look at each situation on a site specific basis for TMDL development.

Senate Bill 160 added definition to the natural condition in statute 75-5-306. Mr. Mathieus said that this is closely related to Senate Bill 325. Senate Bill 325, which came about very late in the process, also addresses the definition of natural. Mr. Mathieus said that DEQ is going to work to ensure that these Senate Bill 160 and Senate Bill 325 complement each other. He said that the difference between the bills is that 325 is currently more expansive. It provides for another definition of natural, which is a non-anthropogenic source. The bill essentially says that DEQ cannot apply a standard that is more stringent than natural. Senate Bill 325 gives the department the ability to apply the natural condition, as has been described by the Environmental Protection Agency (EPA), both in assessment and permitting processes. This bill also provides a benefit for small towns that may have an abandoned mine located upstream from them. A variance could be allowed so that remedial activities can occur without burdening the town with clean up.

House Bill 270 stems from the nutrient criteria. It provides a compliance schedule to meet permit limits. There was stakeholder concern about selectively choosing variances that would or would not be allowed or approved by EPA. This gave the department an additional tool to fit in with the variance process for nutrient criteria. Mr. Mathieus announced that official EPA approval for the nutrient package was received yesterday, February 26, 2015.

Ms. Barbara Chillcott asked if there were any recommendations made by EPA. Mr. Mathieus said that there are not changes that he is aware of, though he had not yet had time to read the entire 33 page approval letter.

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## **ACTION ITEMS**

### **Site Specific EC/SAR Criteria for Otter Creek –**

Mr. Eric Urban, bureau chief of DEQ's Water Quality Planning Bureau, began his presentation by stating that there is a great deal invested in the science behind these rules. He gave a bit of background on Otter Creek, which is a tributary to the Tongue River. It currently has water quality criteria of 500 electrical conductivity (EC) and, dependent upon the season, a 3 or 5 sodium adsorption ratio (SAR). This criteria was established based on a need to protect agriculture. Mr. Urban said that if those numbers are not there, the natural condition becomes the criteria. He explained that 75-5-306 states that wastes do not need to be treated to purer than natural conditions. This places emphasis on the question of what is natural.

Mr. Urban summarized the rulemaking process. Based on a typical rulemaking timeframe, Mr. Urban said that they would anticipate being at the Board of Environmental Review (BER) to request adoption of the rule in July 2015.

Mr. Urban gave an introduction to the presentation to that would follow. He said that from existing data, Mr. Erik Makus developed a model to separate out human-caused numbers. What was discovered was that humans had little influence in altering salt concentrations in the watershed. Setting aside the model, they knew they could then examine the overall data with the knowledge that these were natural salt levels.

Ms. Kathleen Williams asked if there are rule proposals have been pulled off the table based on public input. Mr. Urban said that he is aware of proposed rulemaking efforts that have continued for years without resulting in the adoption of rules.

Mr. Makus, hydrologist for DEQ's Information Management and Technical Services section, explained that DEQ took flow data from the U.S. Geological Survey (USGS) gage at the mouth of Otter Creek and created an annual hydrograph of the creek. There are two peaks: early March and May/June. The March peak, which is the larger peak, results from snowmelt while the May/June peak is from rainfall. The slide he displayed showed a 30 to 40 year average. Mr. Makus then described the data that was used in the model, which included climate data. There were no long-term stations for the national climate data set that were inside the watershed. Instead, they used three stations that were located just outside of the watershed. Mr. Makus then discussed flow data. The USGS gage at the mouth of Otter Creek had been shut off from 1995 to 2003. So, Mr. Makus explained that there are approximately 10 years in the middle of 25 years of flow recordings for which data was not recorded. Mr. Makus said that the data reflected in the model is based off of information collected from 2003 onward.

Transitioning to observed salinity data, Mr. Makus said that there is a lot of information that has been recorded by USGS and DEQ. Since 1974, there have been approximately 300 samples total taken and on four of these instances the data was recorded at or below the standard. In the early 1980s, the EPA paid for daily measurements. This resulted in four or five years of continuous data recordings, which show that salinity never reached the standard or dropped below it. In the 2000s, the EPA funded a salinity meter at the USGS gage. This data was recorded for five summers. Mr. Makus explained that the reason data was not recorded year-round was that USGS retrieves the meters in the winter so that they are not damaged by ice. In 2009, the funding stopped. In March of 2013, DEQ picked up the funding to continue the EC monitoring. SAR data is not quite as extensive. There is a growing season standard of 3 and a non-growing season standard of 5. From 2004-2008, when the USGS was collecting EC data, they also ran a regression for SAR.

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Mr. Makus said that the model used was LSPC. He showed a summary slide of the results of the calibration. DEQ tried to build the model and then set it to match the existing data for flow, EC, and SAR. The one thing that did not match up well was lowest flows, but these represented almost 0% of the total volume. The modeling period represented 2003-2011. After calibration, the climate data matched closely with the data that was in the model. The next task was removing the human influences, which consists primarily of agricultural land use activities. After removing human influences, and re-running the model, the comparison showed that existing land use has not affected the salinity in the watershed. There is no significant difference between existing and historical conditions of salinity. So, with that knowledge, DEQ returned to the dataset to move forward with the rulemaking.

Chairperson Selch asked if Mr. Makus had plotted out data to see if there was a relationship between flow and conductivity. Mr. Makus responded in the affirmative and added that there were some slides to show on that.

Mr. Mitchell Leu asked about the location of upstream samples. Mr. Makus explained that there were two locations in the watershed with a lot of sampling data. One location was near the mouth of Otter Creek, which is just below the East Fork of Otter Creek. The second site is located upstream at the small community of Otter, Montana. Ms. Chillcott asked if the model took climate variability, such as drought cycles, into account. Mr. Makus responded that there were three stations recording temperature and rainfall data on an hourly basis. So, if a drought occurred, it would have been reflected in the model.

Ms. Williams asked about the SAR data recorded on slide six of the PowerPoint presentation. She mentioned that in the 1970s there were low values recorded that did not appear to be represented on the graphs. She asked what could explain the values in the 1970s. Mr. Makus said that the low values are represented on the EC chart. He said that most of those low values occurred during the February/March time frame. He noted that the two low values that were next to each other likely represent the same event. He said that this could be explained by the fact that there was a little more data recorded in the 1970s, and that the 1970s were a much wetter period of time than the 1980s and up until recent years. Ms. Williams said that she was curious because there did not appear to be such outliers later in the timeframe. Ms. Williams then asked why mining was not removed by Mr. Makus when he took human uses out of the data. Mr. Makus said that he would double check that. He believes that he did remove that data. According to Mr. Makus, there were only 10 acres of mining in the watershed out of 400,000 acres. Mr. Makus agreed with Ms. Williams that they should not be listed in the presentation, and he reiterated that he would check to see that these had been removed from the data.

Ms. Karen Bucklin Sanchez asked why this is coming up now in terms of the timeline. Mr. Urban responded that the timing is based on the writing of a TMDL. When they started working on writing the TMDL, they ran into the problem of asking nature to hit 500  $\mu\text{S}/\text{cm}$  EC, which is not possible. Mr. Urban said that he would not deny that there is the potential for a discharge permit in this watershed, which also weighs into the timing, but the primary reason is the scientific need for these standards.

Ms. Sanchez then asked Mr. Makus what the 's' stands for in  $\mu\text{S}/\text{cm}$ . Mr. Makus said that this stands for microsiemens. Ms. Sanchez then asked about the relationship between the modelling means and the proposed rule standards. Mr. Makus replied that Ms. Amy Steinmetz would discuss this subject.

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Ms. Steinmetz, of the Standards Section of DEQ's Water Quality Planning Bureau, reiterated that the model was used to demonstrate that what is currently seen in the data matches what existed historically in the watershed. The model was not used to derive the numbers. Ms. Steinmetz explained that she would be discussing the daily data used to calculate the numbers. There were six years of continuous data and seven years of seasonal data collected. If the grab samples had been used, there would be redundancy. So, they stuck with daily data only. There are 3,051 daily data points for conductivity and flow together, and there are 919 daily data points for SAR and flow. There is not as much data collected in January and February as for the growing season. The topic that was examined the most was agriculture, as it is the most prominent use currently on Otter Creek. Ms. Steinmetz said that the agricultural use is passive. When the water level rises high enough, the water goes around the check dams and onto the low fields that are next to the stream. Ms. Steinmetz said that another important factor for irrigation for the watershed is precipitation. One question that DEQ has received is whether there should be seasonal criteria based on the agricultural use. She said that the answer is no because irrigation happens whenever there is a high flow event, so it is not limited to a specific season. There is not enough variability from month to month to warrant the creation of different criteria.

Ms. Steinmetz showed a slide to help answer the previous question about conductivity and flow. The slide showed 3,050 data points. Ms. Steinmetz said that 3,000 of those data points are lower than 25 cubic feet per second (cfs). There is a lot of variability in that data. High flow events, which occur rarely, tend to have lower conductivity. SAR tends to show the same pattern. To explain why they are concerned with the 80<sup>th</sup> percentile, Mr. Steinmetz said that it is consistent with what other states have done when they have derived criteria based on the natural condition. Also, it is in a range that EPA has approved for this type of standard. Additionally, it is implementable for an assessment. Ms. Steinmetz said that by choosing a low number for an assessment, DEQ would have to give a big range of appropriate exceedance values. So, by setting something too low and not having an allowable exceedance, the stream is going to be impaired. In a natural system, this is not appropriate because the stream is not impaired. Instead the values are natural.

Ms. Steinmetz said that the numbers for the 80<sup>th</sup> percentile of EC data is 3,080  $\mu\text{S}/\text{cm}$  and 6.5 for SAR. As these rules are based on the 80<sup>th</sup> percentile of the data set, there is an allowable 20% exceedance in an assessment. As there is natural variation and because they only have 13 years of data, as opposed to data for a longer time range, there needs to be some allowable variability.

Turning to the proposed rule, Ms. Steinmetz explained that there are three components: natural conditions to protect existing and future most beneficial uses, protection of downstream uses, and numeric criteria. A natural system is not impaired. Uses are designated based on what the water can do. Site specific standards are based on natural condition, and those standards protect the existing and most beneficial uses. Moving to the topic of downstream protection, Ms. Steinmetz said that this concept is in the CWA and the Montana Water Quality Act (WQA). Putting this element into the rule was important to make it clear that when the site specific standards are implemented, downstream protection must also be considered. Increased loading must not cause or contribute to impairment of existing and future most beneficial uses. Turning to the criteria, Ms. Steinmetz said that this rule has been set up so that it can be added onto. If another watershed needed site specific criteria, it could be placed in this section. So, the numeric site specific water quality criteria supersede the numeric water quality criteria for the corresponding parameters listed in 17.39.620 through 17.30.629, which are the use class descriptions that refer to numeric criteria, and 17.30.670, which is where EC and SAR criteria is addressed. The next part of this third section, speaks specifically to Otter Creek. The criteria are based

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on natural and anything done in that watershed must protect that number by maintaining that natural condition.

According to Ms. Steinmetz, another large component that will be going along with this, but which is not in place yet, is an implementation procedure. Ms. Steinmetz expects that this will be in place by the BER request for initiation of rulemaking. She said there can be disconnect if the rule is not clear as far as expectations for implementation. These expectations will be addressed very specifically in the implementation procedure. They will include how the assessments will go based on these rules, how the criteria will be implemented in permit, and also how they will address nondegradation. With the current standards that are in place, the stream is considered impaired and nondegradation does not apply. If the criteria is based on natural, the stream is not considered impaired, so nondegradation rules do apply.

Mr. Michael Wendland mentioned that they had only considered agricultural use, which for the most part was not irrigated. Ms. Steinmetz said that most of the watershed is not irrigated from Otter Creek. Mr. Wendland asked what kind of agricultural use is taking place in the watershed. Ms. Steinmetz replied that it is primarily hay. Sprinkler and flood irrigation practices are not used on Otter Creek because it is a high salinity system.

Ms. Chillcott asked about whether anomalies were removed from the 13 years of data collected. Ms. Steinmetz replied that this is why there is an additional allowance for variability in the assessment. As far as calculating the number itself, that is strictly the 80<sup>th</sup> percentile value, so it does not take into consideration any extra variation. Extra variation is accounted for in assessment. Ms. Chillcott asked if in drought years, those numbers would be higher. Ms. Steinmetz said the answer is possibly. The average flow on Otter Creek is 3 cfs, and there is a lot of variability up to 25 cfs. Even at the higher flows, there is a lot of variability. Lower values occur in the very rare high flow events. All standards are held to a tri-annual review requirement. If there were some very wet years, and there were more data, they could revisit this. Mr. Makus added that they really do not know what the average flow for Otter Creek is over the long term. What they have is close to the middle of the 13 years of recorded data.

Ms. Chillcott then asked about the tri-annual review. She said that it sounded like standards for conductivity were adopted by the department in 2003 and 2006. Ms. Steinmetz said that conductivity standards were adopted in 2002 and 2006. The numeric criteria were adopted in 2002. DEQ designated the parameters as harmful so that nondegradation would apply in 2006. Ms. Chillcott asked what it was about this discharge permit and the need to establish a TMDL that brought this up. Ms. Steinmetz responded that the initial question was why this would appear today. There is a lot of variability in eastern Montana streams. The 500 number was derived to protect agriculture. The department stakeholders knew, in 2002, that there was a lot of variability in those streams. If natural numbers are higher than 500, then natural becomes the standard. Ms. Steinmetz said this was part of the discussion, though it was not included in the rule. This is being addressed separately now. They are responding to needs on a site-by-site and case-by-case basis.

Ms. Chillcott asked if any of the current legislation would influence this rulemaking. Mr. Urban replied that a lot of proposed legislation touches on this subject matter. As far as how it would affect this rule, Mr. Urban said that it would not change how the department would look at this question. They are operating under existing statute to answer the question of what is natural and what a new applicant's permit would be based off of. He does not anticipate any pending legislation changing the ruling.

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Ms. Chillcott asked if the pending discharge permit would be able to meet the standards if this rule passed. Mr. Urban said that it is not a subject that he can answer on. The emphasis of the proposed water quality standard is on protecting the watershed and its uses.

Ms. Williams asked if DEQ had considered the potential for choosing a lower percentage of all available daily data and allowing more exceedances. She asked if it would be more protective to proceed this way. Ms. Steinmetz said that the answer is no. She explained that the 80<sup>th</sup> percentile, 20% exceedance rate, and the 1 in 5 year period are specifically for an assessment. If DEQ selected a 50<sup>th</sup> percentile and allowed more exceedance, they would basically be doing the same thing but allowing more exceedances. A permit gives an average monthly limit and a maximum daily limit. Those are calculated based on criteria. The criteria, as they sit in the rule, are not permit limits. Ms. Steinmetz said that she does not see a 50<sup>th</sup> percentile being more protective because of the way criteria are implemented. Ms. Williams said she is curious how they came to the percentile and the rate of exceedances. Mr. Urban replied that this frequency and rate is also used with nutrient criteria. It is a common approach.

Ms. Williams next asked if water spreading practices, which have been occurring since before the 1970s, would increase the salinity. Ms. Steinmetz said that this is not the situation in Otter Creek. As far as raising soil salinity, there is so much water applied during irrigation that the water also flushes the salts down through the soils. Ms. Williams asked if this would end up back in the system and provide human impact to Otter Creek. Ms. Steinmetz said that the results of Mr. Makus' model showed that this is not the case in Otter Creek. Ms. Williams said that she simply wanted to verify that this had been considered and accounted for. Without having data prior to water spreading practices, that could be problematic. Ms. Williams said she was satisfied with the level of detail given to WPCAC, if this was addressed for the time that data existed.

Ms. Chillcott asked if the model included any soil samples, and what on-the-ground work was done for the model. Mr. Makus said that no soil samples were taken, but they went to the area several times. They spoke with local folks. Other agencies have done some soil sampling in the area, but DEQ did not look into those samples much. Mr. Makus said that, in general, soils in the area vary a lot in composition. One of the inputs into the model was geology and soil types. Ms. Williams said that during water spreading, some of that water is filtering into the soil and some is washing off. If the soils are saline and the spreading occurs, this must have some impact. She asked how this is accounted for in the model. Mr. Makus replied that Otter Creek is heavily influenced by groundwater. Most surface water infiltrates into the soil zone or groundwater zone and then works its way into the creek, as opposed to entering the waterbody as surface runoff. The groundwater has a much higher salinity than surface runoff, and so the dominant force influencing Otter Creek is groundwater. This can be seen by looking at the minimal change in salinity that occurs when a large snowmelt or precipitation event happens. Ms. Williams asked if the model accounted for potential irrigation return flows. Mr. Makus said that it does, but he reiterated that those flows are going to be occurring through groundwater. Ms. Williams said that these would be high in salinity. As such, Ms. Williams asked if the irrigation practices are contributing to the groundwater salinity. Mr. Makus replied that the answer is no. There is limited agriculture occurring in the watershed, and the groundwater already has high salinity. Agriculture is not significantly impacting the salinity of Otter Creek. The total volume for irrigation return flow in the watershed is a fraction of a percent of the groundwater system. Ms. Williams asked if this were determined by comparing downstream and upstream values. Mr. Makus replied that they did that by determining how much irrigated land was in the watershed, knowing how much volume of return flow is coming from this land, and by having an idea of how much groundwater is in the overall system.

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Ms. Chillcott asked if, and when, this proposal was run by EPA. Mr. Urban said that they have been communicating with EPA. It is his understanding that DEQ is following common EPA guidelines for setting site criteria to natural. Overall, Mr. Urban said that he thinks they are in line with EPA. The formal process begins after rulemaking, and after adoption, but DEQ is working with EPA now. Ms. Steinmetz said that an additional EPA requirement is an explanation of how DEQ has shown that what is there is truly natural. They are working on this concurrently with rulemaking. EPA reviews rules after they are made.

Mr. Urban wrapped up the presentation by mentioning that one of his concerns was the tendency to focus too much on the model. He reiterated that the model was used to determine human input, and then it was set aside. Humans have not changed EC much. Mr. Urban said that he is confident that they are working with a natural data set. He said that having such a large data set makes him comfortable with the data and with the 80<sup>th</sup> percentile. This approach allows DEQ to implement the assessment and permitting requirements under the CWA. It also allows them to implement the Montana WQA, 75-5-306. Mr. Urban said that they are asking for the council for input on the rules.

#### **Public Comment –**

Following a short break, public comments were taken. Mr. Art Hayes, president of the Tongue River Water Users Association and resident of a town near Otter Creek, explained that he came to the meeting to talk a bit about the region. He said that the Tongue River originates in Wyoming, and when the river runs into Montana it goes into what used be an inland sea. Here the groundwater cannot be used for irrigation because it is a high saline system. As the Tongue River flows north it picks up salt. Mr. Hayes said that Otter Creek is similar to Hanging Woman. Both of them originate in Wyoming and both run through prairies that are highly saline. Mr. Hayes said that he sees some differences with DEQ numbers. He handed out paperwork from USGS. He said that he believes those numbers should be a little lower than they are on the USGS site. The USGS numbers are EC 275 and SAR 500. Mr. Hayes said that the 500 EC, when rulemaking took place, covered the high flows. That is the reason that the board set the EC at 500 and SAR at 3.

Mr. Hayes said that one thing he did not hear much about in the presentation was flow. He explained that these are small creeks. Hanging Woman cannot be used for irrigation when the flow is low. What he is concerned with not hearing from DEQ is the water contribution from the coal. The SAR of the water coming from coal is 50-70. It is high in sodium bicarbonate, which is toxic to aquatic life and bad for agriculture. Mr. Hayes said that he also believes that DEQ has neglected weather data.

Mr. Hayes explained that there is one mine located on the banks of the Tongue River Reservoir, which he manages. He said that a single discharge out of that mine is 2,900 gallons per minute, which Mr. Hayes states is greater than the flow of Otter Creek. There are a total of seven discharges into that reservoir. He said that for downstream use protection they went through the coalbed methane (CBM). Mr. Hayes said that this is where these rules came originated. He said that, in 2004, there was practically no water coming into the reservoir for 90 days. Yet, according to Mr. Hayes, DEQ allowed the discharge into that system. He cautioned that there is a repeating of the last few years of drier weather. Mr. Hayes said that, in the past, the 1,000 EC limit was exceeded for over 30 days, but DEQ offered no relief. This did not generate a lot a lot of faith in DEQ's enforcement abilities. Mr. Hayes said that Otter Creek Mine has more waters than all the other mines combined. That water will have to come out, as happened at Decker, said Mr. Hayes. When the water is pumped out it is put into ponds. These high salinity ponds then seal up. Experimental ponds were created on Mr. Hayes land. One was lined, and one was not. Within six weeks in the summer, both ponds just turned into evaporation pits. The water did not



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infiltrate into the ground. Mr. Hayes said that Mr. John Wheaton testified in court that these ponds sealed up and evaporated. Montana recognized this in 2011, when they introduced House Bill 121. They wanted to set up an act to take some of the money from coal mining and put it into a fund. This fund would be used to pay for water rights issues and damages pertaining to water coming from coal trust lands. Mr. Hayes said that there is a longstanding tradition of knowledge that the water in Otter Creek is bad, it will discharge, and it will cause damage when discharged.

Mr. Hayes said that, at this time, he does not believe that changing the EC and SAR standards to natural is correct. He believes that the current standards are the correct standards.

Mr. Mark Fix, rancher and irrigator on the Tongue River, spoke next. He explained that he is a past chair of the Northern Plains Resource Council and that he would be speaking to WPCAC as a representative of Northern Plains. Mr. Fix said that he would not personally be affected by any changes in water quality in the Otter Creek drainage. He said that the first thing that he would like to address is DEQ's mission. Their first priority is to protect water, and not to issue discharge permits to allow degradation to those waters. The original standards said that the tributaries may not reflect the natural conditions of Otter Creek, but that they did intend to protect Otter Creek. The state, in defending the current standards in district court, ruled that federal law requires the standards be set respective with ambient water quality. Mr. Fix said that there is no capacity to add point source discharges into Otter Creek. DEQ's rationale for EC and SAR standards is said to be selected to be protective of target crop production, but Mr. Fix said that this is faulty reasoning. He said that these standards have been determined to lead to root zone salinities that corresponded to decreases in alfalfa crop yields. Mr. Fix said that when the CBM industry was strong in Montana, Fidelity built their treatment facility along the Tongue River. Treated water was discharged into the Tongue. Any discharge into Otter Creek will increase the load into the Tongue River and cannot be accepted. Mr. Fix argued that the water from Otter Creek would pick up the salts and discharge the salinity into the Tongue. The existing standards are still being reviewed by EPA. By changing the standards on Otter Creek, Mr. Fix said that the state is putting the justification of the standards in question. He worries that EPA will never approve the tributary standards if the state raises concerns over them. He asked DEQ not to jeopardize the justification that has been used to defend the standards.

Mr. Fix mentioned that he did a 2008 analysis of the data from the USGS gaging station at Miles City after CBM started discharging into the Tongue River. There were increases in EC and SAR. CBM is now on a downturn, and Mr. Fix said that he hopes this will improve water quality in the Tongue as less water is discharged into the river. He said that the claim in the draft discharge permit submitted by Arch Coal is that 1,500 acre feet per year of water will seep from the ponds it creates. These ponds will increase the flow and load into Otter Creek and will run into the Tongue River. DEQ has yet to approve this permit, and Mr. Fix said that he hopes that DEQ will not allow this sort of discharge to occur. He said that nondegradation flow permit will not allow discharges into Otter Creek. It must protect the low flow in Otter Creek, which is 0. Even if DEQ permits an exemption, it cannot exceed 10% of the low flow, which would be zero. Mr. Fix asked what good it will do to change the standard to Otter Creek. He said that with nondegradation, no discharge should be allowed now or if the standards are changed. He asked WPCAC to recommend that BER not approve the proposed changes to Otter Creek. By changing the standards for one tributary, Mr. Fix said that it will open the potential to change the standards for hundreds of others. The TMDL process should take place on the Tongue River before any changes occur to the standards and before any discharges are allowed in Otter Creek.

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Ms. Brenda Lindlief Hall, attorney for the Tongue River Water Users Association, spoke next. Ms. Lindlief Hall said that in 2000, WPCAC and DEQ started looking at the impacts that EC and SAR would have on the Tongue River, Powder River, Rosebud Creek, and the tributaries in the face of the potential for significant CBM development. At that time, WPCAC advised going forward with rulemaking. DEQ brought two rule packages to BER. There was a citizens' petition that was put together by Northern Plains Resource Council, Tongue River Water Users Association, Buffalo Rapids Irrigation District, T&Y Irrigation District, and others. BER held hearings and opportunities for public comment. Members of BER toured this area a number of times. Ms. Lindlief Hall said that the primary focus of the rulemaking was protecting irrigated agriculture. The main crop that they were concerned about was alfalfa, as it is extremely sensitive to salinity.

In 2003, BER adopted numeric water quality standards, including a standard of 500 EC on the tributaries. The CBM industry wanted to maintain narrative water quality standards. Ms. Lindlief Hall said that DEQ adopted a compromise rule at that point in time. They adopted numeric standards for EC and SAR, but they maintained narrative standards for nondegradation review. Ms. Lindlief Hall added that, at this time, DEQ was acting as advisor to BER. They hired Dr. Jim Oster, who Ms. Lindlief Hall described as probably the leading authority on the impacts of salinity on soils and waters. In 2006, another petition was brought to BER to have EC and SAR designated as harmful parameters so that nondegradation review would apply. Ms. Lindlief Hall explained that there had been a lot of discussion pertaining to the non-severability provision of the 2003 rule. She said that typically rules and statutes have severability clauses. She defined the purpose of the clause as, if part of the rule is determined to be unlawful, the rest of the law will still stand. The 2003 non-severability clause, provided that if any part of the rule was determined to be unlawful, then the full rule would be removed and numeric water quality standards would once again be used. So, in 2006, BER removed the non-severability clause and designated EC and SAR as harmful parameters.

Subsequently, EPA approved the water quality standards. Industry challenged Montana's water quality standards in Montana court. They also filed in federal court in Wyoming at the same time. In Montana, the district court upheld the water quality standards. Industry appealed to Montana Supreme Court, and the Supreme Court again upheld the standards. Industry's challenge in Wyoming federal court is still pending. Industry argued that, by setting water quality standards, Montana was trying to reach across state lines to regulate industry in Wyoming. The lawsuit was filed against EPA. The state of Montana intervened, as did the Tongue River Water Users Association. The state rigorously defended the standards. In the federal court case, the judge remanded the case back to EPA to more fully provide the reasoning for upholding the standards. EPA has been doing a literature review as part of this directive. This has been ongoing. Doctor Don Suarez, of the U.S. Department of Agriculture's salinity laboratory, is now involved in assisting EPA in this review.

Ms. Lindlief Hall stated that she believes the timing of the proposed rule changes is poor. She said that she feels that it is inconsistent for DEQ to be defending these standards in the state of Wyoming, while also planning to come before BER to change standards that are still subject to litigation. Also, legislature is still in session, and there may be legislation that will impact these rules. Ms. Lindlief Hall said that she would recommend that DEQ waits before proceeding. She also suggested that they possibly look at technology-based effluent limitations. She mentioned a Montana Supreme Court case, brought by the Northern Cheyenne, regarding CBM discharges, in which the Montana Supreme Court instructed DEQ to apply its best professional judgment and require treatment of those discharges. Ms. Lindlief Hall reiterated that she thinks that there are some other options that DEQ needs to be exploring, and that she believes that proceeding at this time is premature. She said that the standards should be protective,

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and they should protect during times when the water quality is high so that folks can be able to continue irrigating. Ms. Lindlief Hall said that irrigation has been practiced here for over the last 100 years. An economic study done out of MSU found that agricultural production in the Tongue River valley provided about 250 million dollars in revenue to the state, which Ms. Lindlief Hall maintained is significant and needs to be protected.

Ms. Anne Hedges, with the Montana Environmental Information Center, said that moving forward at this time is premature. She explained that, although it feels urgent to pass these rules, this has actually been an issue for 15 years. Conversations still need to be completed to determine whether DEQ is in the right place on the proposed rule. She passed out the brief that the state of Montana submitted in its case in support of its motion for summary judgment. She explained that it was submitted under former Montana Attorney General, Mike McGrath. Turning to page four, Ms. Hedges read a section from line nine of the document. She said that the brief addresses how the technical support document is focused on the impacts on agriculture. Ms. Hedges said that this is what led to the creation of the water quality standards. She said that they started from the point of trying to protect existing uses.

Ms. Hedges then read from line four of the first paragraph on page 19 of the document. She said that the board set the standard at 500 to protect existing agriculture uses, irrespective of ambient water quality, and this is what the state has defended. Ms. Hedges said that this is not new, though suddenly there seems to be a lot of new data. The 1980 data and some of the 2000 data were already available.

Ms. Hedges then discussed the district court decision. She turned to page 20 of the Montana 22<sup>nd</sup> Judicial District Court document and read from the bottom of the page as well as from line 17 of the page. She said that what was being considered back in the early 2000s is what DEQ is asking to re-do today. Ms. Hedges said that she would argue that there is not enough information to go forward at this time and to overturn the previous decision where the state clearly contemplated the same exact issues and decided that it was best to protect the agricultural interests rather than those of others who would add to the salinity of the waters. She also argued that the legislature is considering bills on this topic, and there are two conflicting bills on how the state should define natural. She said that both of those bills will be heard in the house in the next 45 days. The outcome of those conflicting definitions is still uncertain. Ms. Hedges stated that it is premature to go to BER before the legislature has decided the definition of natural. Based on that explanation, Ms. Hedges said that she does not understand how DEQ staff can say that there is no possibility that what legislature will do will have an impact on this rule. Ms. Hedges suggested waiting for a determination to be made at legislature and for natural to be defined before moving forward with the rule.

Ms. Hedges also said that she is concerned with the rush surrounding the rule. She said that the department usually likes to have more time to consult with EPA prior to moving forward with a rule. She expressed that she is wondering why DEQ is not doing that in this instance. Ms. Hedges said that she has asked to view the correspondence between DEQ and EPA on the rule, but that she has yet to see it.

Ms. Hedges then discussed the language of the rule. She said that 17.30.670 was the adopted rule being discussed today, and it does not say 500 or natural. It says 500. The language of the rule is clear. Altering this is a significant change. Ms. Hedges said that the new language of the proposed rule states that EC criteria is 3,080  $\mu\text{S}/\text{cm}$  with an allowable 20% annual exceedance rate. Ms. Hedges said that this means that 20% of the time, the rate can be any amount higher than the allowable rate. It is not clear how much higher is allowable. She also added that the portion of the new rule that says that the EC criterion is, "not to be exceeded more than once in a five year period, on average," is extremely vague. Ms.

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Hedges said that if this is not clear to someone like her, who knows a bit on the subject, she is not sure how this is going to be clear to others. She emphasized that this rule has the potential to greatly influence people's livelihoods. Ms. Hedges said that the language needs clarification. She also said that the data needs scrutiny. She said that in looking on the National Oceanic and Atmospheric Administration's website at the years for which DEQ has data, it appears to her that many of those years were drought years. She said that in the 2000s they are also missing some of the highest flows because they do not have data for the winter months, which are some of the months that folks irrigate. Ms. Hedges said that while she sympathizes with the position that DEQ is in, the rule needs more thought and work before it is ready to move forward. Ms. Hedges added that they should not move forward while there is still a court decision pending. She noted that the timing is poor, as EPA is still reviewing literature, but added that they should have a decision soon. She also reiterated that she feels it would be wise to wait until legislature has made a decision on the bills regarding the definition of natural.

Ms. Tina Laidlaw, of EPA's Water Quality Standards Unit, said that she has been working primarily on numeric nutrient criteria. She stated that she was prepared to answer questions relating to the letter that was just sent to DEQ. She said that she was also prepared to relay questions to colleagues who are working on these other issues. She stated that EPA did not receive this language until Monday, February 23, so they have had a short window to review the proposed rule. They have provided DEQ some informal comments and they have also requested additional information. EPA is committed to continuing to work with DEQ to develop a proposal that is acceptable to EPA. Ms. Laidlaw said that there is work to be done, and that EPA will work with DEQ to address issues.

Ms. Chillcott asked about concerns and questions that have been raised by EPA. Ms. Laidlaw replied that they have asked for some clarification on the duration and frequency components of the proposed rule. She said that EPA will be working out these details with DEQ.

Ms. Vicki Marquis introduced herself as an attorney with Crowley Fleck, which is representing Otter Creek, LLC. Ms. Marquis thanked everyone for their time and effort on what she described as a complicated issue. She said that Otter Creek presents a situation where there are two industries in one watershed: agriculture and coal mining. She said that she would ask people to set emotions aside and focus on setting a reasonable water quality standard that complies with the WQA and can be enforced. She explained that the current standard cannot be enforced because it is impossible to achieve compliance with the standard as it is currently written. Ms. Marquis said that while coal has triggered the issue for Otter Creek, it could have been any other industry on any of the other tributaries to the other rivers that are listed in the EC and SAR rule. She explained that the current standard cannot be complied with and, when a stream cannot comply with a standard, a TMDL is typically done to try to gain this compliance. She said that this is not achievable on Otter Creek.

Ms. Marquis stated that the current standard did not take into account the natural condition. She said that it may have considered ambient condition on some of the mainstems, but it did not consider the existing natural condition of Otter Creek. Ms. Marquis said that, as explained in the presentation, flood irrigation is not used on Otter Creek because of the salinity of the water. The current rule was aimed at addressing CBM. The rule also contemplated relying on natural condition. She referenced MCA 75-5-306, which states that wastes need not be treated to a purer than natural condition. She said that DEQ cited this statute in 2011 during their review of the rationale for the standards. Ms. Marquis said that this is not inconsistent with what has been done before. She described the proposed rule as a refining effort to create a useful standard.

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Ms. Marquis said that the CWA protects designated uses, and that the rule refers to existing and future most beneficial uses. Ms. Marquis said that the state already came up with those designated uses when they classified Otter Creek as C-3, which means that it is marginally useable for agriculture. She said that, as the rule is written, she is unsure whether DEQ is considering reviewing the designated uses and reclassifying Otter Creek. Ms. Marquis said that this should be clarified.

Ms. Marquis also stated that the rule mentions downstream uses. She said that she searched for the term in the WQA and in the federal CWA, but could not find either the term or where it is defined. She found federal rules that require consideration of downstream water quality standard. She said that, in that context, downstream is defined to include both intrastate and interstate waters. She reiterated that this is different than downstream uses. Ms. Marquis said that it is clear that Otter Creek has always been adding high levels of salt to the Tongue River. The standards for the Tongue River should already incorporate that natural addition from Otter Creek. She said that if this is not the case, either the standards need to change or natural needs to change. Standards need to comply with natural conditions and adequately consider downstream water quality.

The rule includes a mix of narrative and numeric standards, as pointed out by Ms. Marquis. She said that, as Ms. Lindlief Hall mentioned, there was confusion in 2006 when the board moved from a narrative nondegradation standard to applying a numeric standard. Ms. Marquis said that perhaps there should be one or the other, or perhaps DEQ needs to clarify when one applies and the other does not. She suggested that this could be improved upon in the rule.

Ms. Marquis explained that the state's nondegradation policy has three tiers of protection: protecting existing uses, providing a higher level of protection for high quality waters, and high quality waters are defined as those supporting all of their designated uses. She said that what she has heard at the meeting is that agriculture needs water at 500  $\mu\text{S}/\text{cm}$  for use. If that is true, then Ms. Marquis said that Otter Creek cannot support that use, so Otter Creek is not high quality water. By saying that Otter Creek does not support all of its uses and is not high quality water, however, Ms. Marquis explained that it is subject to Tier 1 protection, which means that only existing uses are protected. Ms. Marquis said that this is an important distinction because by protecting agriculture at 500  $\mu\text{S}/\text{cm}$ , a higher level of protection is provided. For a harmful parameter, a discharge can only be made if within nonsignificance criteria or with an authorization to degrade. She explained, in this situation, even if there was water with no salt in it, it could not be discharged to Otter Creek because it would not meet the nonsignificance criteria. She said that to enact a standard that triggers nondegradation standards at a Tier 2 level, a nonsignificance criteria needs to also be considered so that pure water could be added to the stream without triggering an authorization to degrade. Ms. Marquis said that it would be helpful to clarify the tier of nondegradation protection applicable in the draft rule, and to also provide nonsignificance criteria if necessary.

Ms. Marquis said the primary concern is the salt load. She explained that load is a function of flow and concentration. When one of those parameters is increased, it does not mean that the other is increased. TMDLs address load, but in order to get to a TMDL that has authority and is enforceable, it is imperative to show that the stream is impaired. She said that this does not fit well in this situation where the stream is naturally so high in salinity. Ms. Marquis said that Montana is not the first state to have these problems with saline. The Colorado River Salinity Control Forum is dealing with the much larger Colorado River. Only half of the saline in the Colorado River is natural, so the situation is different from that of Otter Creek. The group has approached the salinity based on standards that were set on flow weighted average amounts. She said that this might be helpful to consider, but that rulemaking must be

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initiated in order to reach some of these issues. She added that the group has also set benchmark levels for point source discharges. They considered the instream load at the point of discharge. They also recognized freshwater additions to the river, and determined that if adding a load of less than one ton of salt per day, the water was considered freshwater and the salt load was deemed acceptable. Ms. Marquis said that there must be some level of freshwater that would be okay to add to Otter Creek.

Ms. Marquis emphasized that all of this is on top of technology-based effluent limits. She reiterated that the current standard cannot be met or enforced, and that she is in support of the development of a useable standard. She said that she does not believe that this is a premature development as they have had the data for a long time. They have already gone through the rulemaking process and contemplated the issue that is coming up. Ms. Marquis added that there are other areas in the nation that have already gone through this process and have seen positive results. She urged WPCAC members to recommend the initiation of rulemaking and to do so now. She also urged WPCAC to recommend viewing the rulemaking based on the natural condition and addressing nonsignificance criteria if necessary. Ms. Marquis said that the rule does need more work, but she is in support of starting that work now to develop a useful and enforceable standard.

There were no additional public comments.

Mr. Smith brought up the 10 acres of mining that was mentioned by Mr. Makus during his presentation, and he asked if it is coal mining. Mr. Makus replied that he is unsure. He explained that when the ALC classified, they did so based off of aerial photography. Mr. Makus said that he is aware of smaller, personal-use former coal mines in the watershed, but that the mining acreage numbers and land use are located solely in the Ashton area. Mr. Smith asked if there is a discharge permit for any of that, and Mr. Makus replied that there is not. He added that there is likely no activity associated with that mining acreage.

Mr. Smith wondered if Mr. Hayes might know about the mine. Mr. Hayes said that there was a small family-owned coal mine with no discharge coming from it, which covered about 10 acres. Mr. Hayes said that this area has gone through reclamation. Mr. Smith asked if he was correct in understanding that any salinity from the coal was being discharged to groundwater. Mr. Hayes said that this is correct. He said that on the upper part of Otter Creek, salinity was higher than down lower. He said that those tiny creeks, when cutting through a coal vein, can contribute greatly to, and skew, EC and SAR. Mr. Smith asked Mr. Hayes if this is all naturally occurring. Mr. Hayes replied that, as far as he knows, it is.

Ms. Chillcott asked how DEQ is dealing with defending the current rule in federal court and also proposing the new rule at the same time. Ms. Steinmetz replied that DEQ is not attacking the validity of the science. They are merely saying that Otter Creek is a different situation, where 500  $\mu\text{S}/\text{cm}$  does not apply. Ms. Chillcott asked Ms. Steinmetz if she sees Otter Creek as a starting point upon which other tributaries will be examined going forward. Ms. Steinmetz said that this would be examined on a stream-by-stream and watershed-by-watershed basis. Mr. Urban said that this comes down to the question being asked. He explained that today the question is what is the natural condition of the stream, when previously the question was what is the water quality that we want for agriculture. Ms. Chillcott asked what is bringing about the change in questions. Mr. Urban replied that when they tried implementing the existing standard, they ran into the problem of being unable to implement it. He said that developing numbers is one thing, but implementing them is another. He explained that they have run into that with nutrient criteria as well. Mr. Mathieus added that the topic of natural was discussed back in early 2000. He said that it was defended in court in Wyoming. He stated that EPA and DOJ even

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said that when the natural condition exceeds the standard, the natural condition is the standard. So, the discussion was there, but it simply was not made part of the rule at that time.

Mr. Smith asked why DEQ is focusing on Otter Creek as opposed to Tongue River, Hanging Woman Creek, or the whole basin. Mr. Mathieus responded that the TMDL that DEQ embarked on specifically for Otter Creek triggered this focus. Mr. Smith mentioned that the standard for Otter Creek is 500  $\mu\text{S}/\text{cm}$ . Mr. Urban said that the mainstem is 1000  $\mu\text{S}/\text{cm}$ . Mr. Smith asked for clarification that the TMDL does not amend the standards on the Tongue River. Mr. Urban said that it does not. This was a use-based standard. He said that this is a bit different than Otter Creek, where they asked what is natural. Mr. Smith said that he is trying to understand why the standard for Otter Creek, 500  $\mu\text{S}/\text{cm}$ , does not seem to apply anywhere else in the basin. Mr. Urban explained that 500  $\mu\text{S}/\text{cm}$  applies to all tributaries to the Tongue, Little Powder, Rosebud, and Powder. It simply does not apply to the mainstem.

Ms. Neuman asked why judge one by natural and the other by the standard. Mr. Urban answered that the WQA is clear in what a discharge limit has to be written to. He said that the root question is how to implement the standard. Mr. Urban said that 500  $\mu\text{S}/\text{cm}$  is a struggle to implement in Otter Creek, and it is impossible to ask for a reduction in natural conditions.

In response to a question of whether other tributaries exceed 500  $\mu\text{S}/\text{cm}$ , Mr. Urban said that it is likely.

Ms. Chillcott asked how the two bills pertaining to the definitions of natural will play into this. Mr. Urban replied that DEQ defined natural as in the absence of humans. He said that he does not envision legislature coming up with something less than that. Ms. Chillcott said that she has trouble with a rule being based on a very precise definition of the term natural. Mr. Urban said that the definition may change but that, for purposes of the research and modeling done on Otter Creek, DEQ went as far as possible and completely removed humans from the watershed. So, Mr. Urban said that he is not concerned that legislature will pass a more conservative definition of natural that would affect the proposed rule.

Ms. Chillcott asked what would happen if DEQ waited until after the legislative session, when DEQ would have been able to hold more detailed discussions with EPA. Mr. Urban responded that this is a question of timing. There is language in the WQA that if any individual petitions the board, there is an established 90 day timeframe. Right now, DEQ is not operating under that petition. Mr. Urban said that he feels that DEQ has substantial data, and they will not need to change the data set. He said that from an outreach perspective, DEQ could use more time. He explained that he has been asked to move forward now. Mr. Mathieus also responded to Ms. Chillcott's question on timing. He said that he would argue that there is a feeling of urgency, but he believes that they have been taking the process seriously and all of the elements have come together at this time.

Brenda Lindlief-Hall stated that, regarding site specific standards versus general standards, in 2001, in the original citizens' petition, they looked at segment-by-segment water quality standards on the Tongue. She said that this did not apply to the tributaries because, based on the science, there was a clear regulation that the 500  $\text{cm}/\text{us}$  EC protected the few times when there is high quality water, which is essential for irrigation. Mark Fix added that at first they were told that the standard would be set at the mouth. Salts are additive and accumulate as you move toward the mouth of the Tongue River, so they set the standard at Miles City, because it is about two or three hundred higher there than at the state line. The tributaries are all so different that it was decided that a number would be derived to protect the common most sensitive use, which is spreader dike irrigation.

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Mr. Urban said that most states operate with generic, statewide-level numbers. He said that with enough money, staff, and time, DEQ would set site specific standards for every stream and parameter. It is not achievable, but it is the ultimate goal. He said that he guarantees that other site specific standards for other streams will be brought before BER in the future though. He added that some of these will be based on natural and others will be based on protecting uses.

Chairperson Selch said that he views this as DEQ needing to develop site specific standards. What they presented today was their interpretation of what natural conditions are, and the proposed EC and SAR criteria. He said that he understands that there are some things pending legislation and that DEQ will need to continue to have discussions with EPA. He added that if something changes the proposed rule, it will certainly affect what goes to BER. Chairperson Selch explained that what WPCAC is being asked to do is determine if they think the background conditions and proposed site specific criteria are appropriate. Ms. Steinmetz added that WPCAC members are being asked to suggest areas of the proposed rule that need clarification.

Mr. Salley said that he is not comfortable with the numbers and the 20% annual exceedance rate. He said that it is too broad of a window for exceedance. Mr. Smith said that he would like additional explanation. Ms. Steinmetz said that the language structure is primarily for assessment. They would derive the permit limit from the number. Mr. Smith asked if he could assume that the permit limit would be much lower so as to not risk exceedance. Ms. Steinmetz said that the permit limit would still be in the natural range, but it would consider that the number is in the 80<sup>th</sup> percentile.

Mr. Smith said that he does not understand what the 20% means. Ms. Steinmetz said that they would be clarifying this in the implementation procedure. She expressed that what they do not want is to be unclear at this point. If it could be misinterpreted, Ms. Steinmetz said that they need to clarify that language. She added that the implementation procedure will not be a rule, so it is necessary to be as clear in the rule as possible without laying out the entire process.

Mr. Smith asked if, in the discharge permits, the permit will be written so that it measures at the point where discharge to the creek occurs or so that where the water meets the Tongue, the numbers do not change. Ms. Steinmetz responded that an effluent limit would apply at the point of discharge.

Ms. Williams said that it is challenging to assign a number as the description of natural when there is a range. She said that it seems to her that to assign a number to natural might require setting flow-indexed monthly exceedances. She added that it seems problematic to select one set number for a variable system.

Ms. Williams said the EPA website states that the purpose for water quality criteria is sufficient coverage of parameters and of adequate stringency to protect designated uses. She asked how the proposed rule protects agriculture, assuming that it is a designated use. Ms. Steinmetz responded that the rule is protective because it is an opportunistic use. The water's EC is not always 500  $\mu\text{S}/\text{cm}$  when it goes onto the field. She said that there is a great deal of variability in EC until flow reaches 50 cfs, which is a rare occurrence. So, the level of conductivity going onto the field is dependent upon what it is when the flow reaches a level high enough to spread the water onto the field. Ms. Williams asked if they know the range. She said that without an upper bound on the exceedance, she is not clear that the standard will protect the agricultural use. She asked how they know that the use is protected. Chairperson Selch asked if 20% exceedance is 20% of the time. Ms. Steinmetz responded in the affirmative. Mr. Urban said



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that they protect agriculture through a permit. The permit will be written to the standard. They do not know what an industry is proposing for volumes and concentrations, so they cannot speak to the permit. He said that they can, however, say that the proposed number is acceptable to the uses because it is built around what exists on Otter Creek. Mr. Urban said that discharges and protecting future uses, is governed by discharge permit.

Ms. Williams asked if she is correct in believing that the EC criterion of 3,000  $\mu\text{S}/\text{cm}$  is unusable for agricultural purposes. Ms. Steinmetz replied that if the flow is high enough that the water goes onto the field, it is the water that is being used. Ms. Williams expressed interest in more information on that subject.

Ms. Williams commented that the new rule refers to Otter Creek, but that there is probably more than one Otter Creek in the state. She suggested identifying the specific Otter Creek being referred to in the rule. Ms. Steinmetz pointed out that the current version of the new rule addresses this and specifies that Otter Creek is tributary to the Tongue River. Ms. Williams said that she needed to leave the meeting, but she added that Chairperson Selch would be able to proxy on her behalf.

Chairperson Selch asked if anyone had a motion to propose before Ms. Williams left the conversation. Mr. Wendland pointed out that this is an action item and that WPCAC is simply advisory to BER. He moved to recommend requesting to BER the initiation of the rulemaking for Otter Creek site specific standards. Ms. Williams asked for clarification that the motion is only to start rulemaking, so there will be additional opportunity for public involvement and response to suggestions and concerns. Mr. Wendland said that he thinks that is correct, but the motion could not be discussed further without a second motion. The motion was seconded. Mr. Salley said that he believes there will be a lot more discussion, but that the motion is simply to recommend requesting the initiation of rulemaking for Otter Creek.

Ms. Williams asked DEQ about the normal threshold of readiness when they start to go into rulemaking. Ms. Steinmetz answered that they like to go to the board when they are fully prepared. She added that they have a public process that allows for adjustment. Ms. Steinmetz said that this situation may be a little unusual, but they have a public process for determining that the end result is the appropriate one. Ms. Williams asked what would happen if WPCAC encouraged DEQ to do more work and return with a better proposal at the next meeting. Ms. Steinmetz said that council members could certainly make that recommendation. Mr. Smith asked Ms. Williams whether she was moving to amend the motion, or if she was merely giving an opinion. Ms. Williams responded that she was simply asking a question. She said that based on Ms. Steinmetz answer, she would vote no on the proposal. She said that she does not believe the proposed rule is ready at this point. Ms. Williams added that she believes the process would be greatly improved for the public, whom she represents on the council, if this version had a little more work put into it. She said that there is an issue, and there have been some great suggestions, but that she feels that the proposal would benefit from some more work before the formal process starts.

Chairperson Selch reiterated that the motion to initiate rulemaking would be to move forward given the current proposed numbers and language. Chairperson Selch said that he believes there is a lot of uncertainty regarding the language and the upper bound of the 20% exceedance.

Ms. Neuman said that, while she appreciated the effort of the department, she did not feel comfortable supporting the proposed rule. She suggested examining the rule based off of the input that was received during the WPCAC meeting. Mr. Urban said that the department will respond to all advice provided by

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the council. He suggested perhaps it would be appropriate to provide a motion to address language in the 20%. He asked for specific guidance from WPCAC. Mr. Leu said that he would feel a lot more comfortable if that language could be clarified prior to this going to BER.

A vote was taken on the motion. Mr. Wendland voted for the motion; the rest of the council voted against the motion. The motion failed to pass.

Chairperson Selch asked the council for more detailed explanation. Ms. Williams suggested that the department look into Ms. Marquis' suggestion that DEQ consider the work being done in Colorado. She also suggested that they consider setting flow-indexed monthly exceedances. Finally, Ms. Williams emphasized that the standard needs to protect agricultural uses.

Mr. Smith asked what would happen if a discharger came along and doubled the flow. He asked if there would be a cumulative effect where the Otter meets the Tongue. Ms. Steinmetz said that they do not have information on what the mine would propose to discharge. She said that in a nondegradation review, part of what is considered is the flow. She stated that it is based on a monthly average. She explained that if a discharger is going above 10%, then an authorization to degrade is required. Ms. Steinmetz said that an authorization to degrade always considers protection of downstream designated uses, which cannot be impacted or removed.

Ms. Sanchez said that she would like to see analysis of the EC and SAR levels at the flow rates that irrigators are using. Ms. Steinmetz said that they have looked briefly at that. They determined that bankfull is approximately 18 cfs. They examined different flows above 18 cfs and looked at the conductivity values of those ranges. She said that between 18 and 25 cfs, irrigation water is actually worse than the entire data range. Ms. Sanchez said that this is something to consider explaining in more detail at a later meeting. Ms. Steinmetz added that above 50 cfs that there is a significant drop in conductivity.

Chairperson Selch said that he felt that there was uncertainty among the WPCAC members regarding the proposed rule. He added that it was not his intent to hold up DEQ's rulemaking process, but that getting answers to some of the questions voiced was important. Mr. Urban said that procedurally the department is asking WPCAC for advice on rulemaking. He said that they will incorporate advice and provide feedback, but DEQ is not required to return to WPCAC and continually revise the proposal. He said that those revisions are supposed to occur during the comment period of rulemaking. They are asking for advice to incorporate into the rule package for the board. Ms. Williams asked if Mr. Urban was saying that they are going to move ahead even without WPCAC's recommendation to BER to initiate rulemaking. The response was that DEQ may request initiation without WPCAC's recommendation.

Ms. Chillcott asked if they would return to WPCAC even if they are not obligated. Mr. Mathieus answered that the dialogue today warrants attention. At this point, the department will pause for discussion. He said that DEQ is strong on transparency and public process, and they will ensure that concerns are discussed and mediated. He asked WPCAC to give the department opportunity to address those concerns and to contemplate where they are at with the proposed rule.

Chairperson Selch said that, as an advisory council, they have made those concerns known and he feels that DEQ has heard those concerns. He added that whether they have another opportunity to vote on this in the future, he feels that WPCAC has stated their concerns.

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Ms. Chillcott requested that timing be added to the list of concerns.

Ms. Neuman asked if the comments and discussion that had occurred at the meeting would be expressed to the board if the rule were not brought before WPCAC a second time. Ms. Steinmetz replied that WPCAC makes recommendations to the department and often DEQ shares those comments and concerns with the board. She said that she did not see any reason why the department would not share that information.

**Agenda Items for Next Meeting –**

The next meeting is scheduled for May 8, 2015. Ms. Steinmetz noted that, at that time, there will be a briefing on where they are with the site specific EC/SAR criteria for Otter Creek. Another agenda item, which will be an action item, will be a tri-annual review for the criteria. At the May meeting, Mr. Jon Kenning, bureau chief for DEQ's Water Protection Bureau, will be giving an update on one of the permitting rules that has been brought before WPCAC.

Ms. Steinmetz said that a year ago, Mr. Darrin Kron and Mr. Jim Stimson spoke to the council about oil and gas in Montana. At that time, council members had asked for an update to be held in a year. Ms. Steinmetz said that she will follow up with Mr. Kron and Mr. Stimson to see if they would present an update to WPCAC. Ms. Steinmetz added that they will also be continuing the section presentations from the Water Quality Planning Bureau. If council members have additional suggestions for briefing items they can be sent to Ms. Steinmetz or Chairperson Selch via email.

Mr. Salley asked about the cleanup process for Bell Creek. He asked if it would be possible to have someone present on the planning for this process. Chairperson Selch said that it is certainly possible to seek out a presenter for the topic.

**ADJOURN**

Chairperson Selch sought a motion to adjourn the meeting. There was no other business; the meeting was adjourned.

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## **REFERENCED LINKS FOR MEETING MATERIALS**

(Sites last updated 3/2/2015)

### **February 27, 2015 Agenda -**

[http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/AGENDA\\_2-23-15.pdf](http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/AGENDA_2-23-15.pdf)

### **Agenda Links:**

Minutes from January 9, 2015 -

<http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/1-9-2015DRAFTMinutes.pdf>

Site Specific EC/SAR Criteria for Otter Creek -

<http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/WPCACAgendaForm.pdf>

New Draft Rule -

[http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/NEW\\_SECTION.pdf](http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/NEW_SECTION.pdf)

New Rule Statement of Reasonable Necessity -

<http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/StatementReasonableNecessity2-24-15.pdf>

Otter Creek PowerPoint -

[http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/WPCAC\\_OtterCreek.pdf](http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2015/February27/WPCAC_OtterCreek.pdf)

Submitted by,

Sarah Norman 3/20/2015